



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

June 12, 2012

By E-mail and Mail

Andrew M. Kenefick
Senior Legal Counsel
Waste Management
720 Fourth Avenue, Suite 400
Kirkland, WA 98033

**Re: Proposed Plan of Study for Detention Basin Evaluation
Waimanalo Gulch Sanitary Landfill**

Dear Mr. Kenefick:

Enclosed please find EPA Region IX's comments on the Proposed Plan of Study for Detention Basin Evaluation submitted for Waimanalo Gulch Sanitary Landfill by GEI Consulting on February 27, 2012 (Project Number 070181). Once you have reviewed our comments, we are prepared to discuss the remaining issues regarding the proposed plan at your convenience. We would like to resolve the issues posed by our comments before taking formal action on the Detention Basin Evaluation.

If you have any questions or concerns regarding the attached comments, you may contact me at (415) 972-3895 or via email barroll.hugh@epa.gov. If you have questions related to the technical aspects of our comments please contact Estrella Armijo at (415) 972-3859 or via email at armijo.estrella@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Hugh Barroll", is positioned below the word "Sincerely,".

Hugh Barroll
Assistant Regional Counsel

Enclosures:

Attachment A - *EPA Region IX's comments on the "Scope of Work" of the February 27, 2012 Proposed Plan of Study for Detention Basin Evaluation – Waimanalo Gulch Sanitary Landfill*

cc: Kimberly Bick (email only)

Attachment A - EPA Region IX's comments on the "Scope of Work" of the February 27, 2012 Proposed Plan of Study for Detention Basin Evaluation – Waimanalo Gulch Sanitary Landfill

In general, EPA agrees with the scope of work as described, however, we have the following specific comments:

Detention Basin Features

1. The Plan of Study describes the North and South Basin Areas but does not provide a volume for each. While not necessary for the Plan of Study, the volume of each basin area should be included when describing the detention basin.

Assumptions

2. The Plan of Study states that the model will be based on data from the Palehua rain gage, NOAA data, and on-site rainfall records. Will these data sets be merged or will there be separate model runs for each data set?
3. GEI states that it will run the HEC-HMS model under the assumption that the detention basin is empty prior to each storm. What is the basis for this assumption as GEI also notes that the sediment forebay provides a retention function and "often contains a small pool of water?"
4. Several portions of the Plan of Study appear to rely on "historic data" to determine the pollutant loads into the basin. However, EPA is not aware of any such historic data that characterizes pollutant loading into the basin. Samples have been collected from the detention basin outlet and from areas above the landfill (up-canyon), but not from the basin inlet. Further, due to completion of the Western Diversion System and affiliated stilling basin, run-off from above the landfill no longer enters the detention basin. Therefore, it is not valid to assume that up-canyon water quality characteristics are indicative of the quality of water entering the detention basin. To address this issue, the Plan of Study should include a water quality sampling element that addresses inflow to the detention basin. This sampling effort should address the constituents WM is required to analyze under its NPDES permit, and should specifically assess what portion of these loadings are in the dissolved and suspended fractions of the influent to the detention basin. This sampling need not address flows from up-canyon areas that are now being diverted from the detention basin.

Published Water Quality Benefits

5. While not necessary before the Plan of Study is approved, EPA would like to know which "available published presumptive water quality benefits for similar detention systems," Waste Management will be using.